BEST AVAILABLE COPY

AMEND THIS APPLICATION AS FOLLOWS:

In The Specification:

Page 1, before the "BACKGROUND OF THE INVENTION" insert a new title as
follows:

--SUGAR MOIETY LABELED NUCLEOTIDES--

Page 1, line 1, before "BACKGROUND OF THE INVENTION"
        insert the following:
              -- CROSS-REFERENCE TO OTHER RELATED APPLICATIONS
                    This application is a continuation of U.S. Application
                    Serial No. 07/531,953, filed on June 1, 1990, which is a
                    divisional of U.S. Application Serial No. 07/140,980,
                    filed on January 5, 1988, now abandoned, which in turn
                    is a continuation of U.S. Application Serial No.
                    06/391,440, filed on June 23, 1982, abandoned.--

Page 2, line 1, change "quantatively" to --quantitatively--.

Page 2, line 20, between "April 17, 1981." and "The disclosures of this"
insert the following sentence:

              -- Serial No. 255,223 was abandoned in favor of continuation
                    application, U.S. Application Serial No. 496,915, filed on
                    May 23, 1983, now U.S. Patent No. 4,711,955. Therefore,
                    the disclosure of U.S. Patent No. 4,711,955 is herein
                    incorporated by reference and made part of the instant
                    disclosure.--

Page 3, sixth line from the bottom of the page, change "emcompassed" to
        --encompassed--.

Delete the following portion of the specification:
        Page 4, line 1, through page 52, line 18.

Enz-5 (D5)(C)

Page 52, lines 20 and 21, change "The aforementioned publications are herein incorporated and made part of this disclosure" to read as follows:

--The publications cited in the aforementioned U.S. Patent No. 4,711,955 are also herein incorporated and made part of this disclosure.--

Page 90, 7th line from the bottom of the page, after "P moiety" and before the comma ","
        insert --(also designated hereinbelow as "PM")--.

Page 90, 6th line from the bottom, after the first word in the line "moiety" and before the comma ",", insert
        --(also designated hereinbelow as "SM")--.

Page 90, 6th line from the bottom, after "a base B moiety" and before the comma "," insert
        --(also designated hereinbelow as "BASE")--.

Page 90, 4th line from the bottom, after "P, S or B moiety" and before the comma "," insert
        --(referred to hereinbelow as "PM," "SM"
               and "BASE," respectively)--.

Page 90, 3rd line from the bottom, after "various base B moieties" insert --(BASE)--.

Page 93, line 3, after "B moieties" and before the comma ","
        insert --(PM, SM and BASE, respectively)--.

Page 93, line 4, after "and/or B moieties" and before the period "."
        insert --(PM, SM and BASE, respectively)--.

Page 93, line 9, before the first word of the line "wherein"
        insert --(PM — SM — BASE — Sig)--.

Page 93, line 9, after "P" insert --(PM)--.

Page 93, line 10, after "S" insert --(SM)--.

Page 93, line 11, after "the base moiety" insert --(BASE)--.

Page 93, line 12, after "P" and before "is attached" insert --(PM)--.

Page 93, line 13, after "S moiety" insert --(SM)--.

Page 93, line 15, after "base B moiety" insert --(BASE)--.

Page 93, line 17, after "S moiety" insert --(SM)--.

Page 93, line 19, after "B moiety" insert --(BASE)--.

Page 93, line 23, after "P — S — B —Sig"
      insert --(PM— SM— BASE— Sig)--.

Page 93, last line, after   "Sig
                                    |
                         P —— S ——B"

insert   -- (Sig
                       |
              PM — SM — BASE)   -- .

Page 94, line 3, after "phosphoric acid moiety" insert --(PM)--.

Page 94, line 4, after "sugar S moiety" insert --(SM)--.

Page 94, line 5, after "base B" insert --(BASE)--.

Page 94, line 6, after "sugar S moiety" insert --(SM)--.

Page 94, line 6, after "base" insert --(BASE)--.

Page 94, line 8, after "sugar S moiety" insert --(SM)--.

Page 94, line 9, after "S moiety" insert --(SM)--.

Page 94, line 17, after "P - S - B" insert the following

           -- Sig
               |
     PM—SM —BASE   -- .

Page 94, line 19, after "moiety," insert --(SM)--, both occurrences.

Enz-5 (D5)(C)

Page 94, line 26, before the first word in the line "wherein" insert the
following:

$$\begin{array}{c} -- \quad \text{Sig} \\ | \\ \text{PM} - \text{SM} - \text{BASE} \quad --. \end{array}$$

Page 94, line 26, after "P" insert --(PM)--.

Page 94, line 27, after the first word in the line "moiety"
        insert --(SM)--.

Page 94. line 27, after "B" insert --(BASE)--.

Page 94, line 28, after "the P moiety" insert --(PM)--.

Page 94, line 29, after "the S moiety" insert --SM--.

Page 94, line 31, after "The base B" insert --(B)--.

Page 94, line 32, after "the B moiety" insert --(BASE)--.

Page 95, line 1, after "said B moiety" insert --(BASE)--.

Page 95, line 4, after "moiety" insert --(PM)--.

Page 95, line 10, after "P moiety" insert --(PM)--.

Page 95, line 19, after "P − S − B − Sig" and before the comma ","
        insert --(PM — SM — BASE — Sig)--.

Page 95, line 21, after "moiety" and before "at" insert --(BASE)--.

Page 95, line 22, after "moiety" and before "is" insert --(BASE)--.

Page 95, line 23, after "the B moiety" insert --(BASE)--.

Page 96, line 5, after "acid moiety P" insert --(PM)--.

Page 96, line 5, after "sugar moiety S" insert --(SM)--.

Page 96, line 5, after "base moiety B" insert --(BASE)--.

Page 96, line 6, after "P-S-B" insert --(PM - SM - BASE)--.

Page 96, line 11, after "the P moiety" insert --(PM)--.

Page 96, line 11, after "the S moiety" insert --(SM)--.

Page 96, line 12, after "the B moiety" insert --(BASE)--.

Page 96, line 13, after "P-S-B" insert --(PM — SM — BASE)--.

Page 96, line 15, after "P-S-B" insert --(PM — SM — BASE)--.

Page 96, fourth line from the bottom of the page,
    change "peroxidase or" to --peroxidase, --.

Page 96, third line from the bottom of the page,
    change "nuclease." to --nuclease, acid phosphatase or
        β-galactosidase.--

Page 97, 10th line from the bottom of the page, after "base B component"
and before "therein" insert --(BASE)--.

Page 97, 9th line from the bottom, after "the sugar S component" and
    before "therein" insert --(SM)--.

Page 97, 8th line from the bottom, after "component" and before
    "thereof." insert --(PM)--.

Page 97, last line, after "255,223" and before the period "." insert
    --, now U.S. Patent No. 4,711,955 --

Page 98, line 7, after "S or B moieties"
    insert --(PM, SM or BASE, respectively)--.

Page 103, line 13, after "P" insert --(PM)--.

Page 103, line 13, after "S" insert --(SM)--.

Page 103, line 14, after "B" insert --(BASE)--.

Enz-5 (D5)(C)

Page 103, line 16, after "P, S or B moieties"
    insert --(PM, SM or BASE)--.

Page 104, line 6, after "S, B and Sig" and before the comma ","
    insert --(PM, SM, BASE and Sig, respectively)--.

Page 104, line 18, after the first word in the line "Sig" and before "and
    especially" insert the following
            --PM — SM — BASE — Sig --.

Page 105, line 8, after "Sig components" and before "wherein"
    insert --(PM, SM, BASE and Sig)--.

Page 105, line 10, after "moieties"
    insert --(PM, SM and BASE, respectively)--.

Page 105, line 23, after "P, S, B" insert --(PM, SM, BASE)--.

Page 105, line 15, after "Sig-containing"
    insert --(PM, SM, BASE and Sig, respectively)--.

Page 110, line 9, after "the sugar S" insert --(SM)--.

In The Claims:

Cancel claim 1.

Add new claims 204-237 as follows:

Enz-5 (D5)(C)